DOCUMENT RESUME

ED 051 879 PS 004 801

AUTHOR	Byers, Libby
TITLE	To Laugh is to Know: A Discussion of the Cognitive Element in Children's Humor.
PUB DATE	[70]
NOTE	11p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*Child Development, *Cognitive Development, *Educational Television, *Humor, Intellectual Development, Language Role, Motivation, *Teaching Techniques, Television Viewing
IDENTIFIERS	Sesame Street

ABSTRACT

The development of children's humor is described, focusing on the cognitive aspect of what is funny and how this relates to children's intellectual growth. Cognitive elements that facilitate children's humor are identified as: (1) the ability to grasp incongruities, (2) the presence of an intellectual challenge, (3) timing, (4) novelty, and (5) a sense of detachment from the situation in the joke. Humor, as used on Sesame Street, is discussed as an instructional technique to reinforce and expand recently learned concepts. (NH)

ED051879

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

TO LAUGH IS TO KNOW
A Discussion of the Cognitive Element in Children's Humor

by Libby Byers

Everyone likes to laugh, but a serious study of humor is a paradox because the process itself has the effect of causing the elusive essence of humor, that which is funny, to evaporate. Humor is a serious business, we humans must laugh, for upon laughter depends our talent for stabilizing ourselves and refreshing our souls. Realization of the absurd, ludicrous, incongruous, paradoxical elements of our lives facilitates facing our problems and coping without undue stress.

Theories of Humor

There are many theories of humor, and they provide good living room talk, pitting one notion against another. Most of the theories are drawn from psychoanalysis: Humor is seen as a socially acceptable outlet for mounting tensions and anxieties regarding socially unacceptable hostile, aggresive or sexual impulses. In 1954 Martha Wolfenstein (1) wrote a definitive book on a psychoanalytic basis of children's humor: all of it is said to be a disguised reference to sexual or excretory functions; the mainspring of all drives is in the pelvis.

Levine (2) describes a variation of psychoanalytic theory, the social theory of humor. It explains humor as a regulatory mechanism for maintaining balance in a society. The expression of disruptive impulses is more acceptable within a joking framework, e.g. "Smile when you say that, Pardner." Anthropologists see ritualistic joking

PS 004801

* Reproduced by the ERIC Clearinghouse on Early Childhood Education

and clowning in primitive cultures as "...defining and maintaining the boundries of certain social kinship relationships." Another function of humor in social groups is to promote group cohesiveness with an atmosphere of laughter and conviviality.

A third theory of humor focuses on the cognitive process in humor, an aspect that has until quite recently received very little attention. Humor cannot exist without an intellectual appreciation of an element of incongruity that transforms a pedestrian event into an absurdity, funny enough to make us laugh. But not all incongruities are funny.

This paper is an attempt to describe the development of humor in children as it relates to their intellectual growth. It does not dispute other theories, but simply focuses on the cognitive aspect of what is funny; it recognizes that Piaget is to theories of cognition what Freud is to theories of personality.

A Developmental Approach

In the beginning is the baby's smile, not really humor, perhaps pre-humor, but an expression of good spirits and well being during the sensory-motor period, looking and moving, at first reflexively, and then intentionally. Many authors and all mothers realize that this smile of recognition, starting at about five or six weeks of age, is a momentous achievement. This is the human's first step away from egocentrism, but not yet at an understanding of a primary element of the humerous situation, an incongruity: self-not self. Here are the rudiments of socialization, an event that evokes a smile, a step in the direction of distinguishing objects in the environment from ones own body.

Rene Spitz (3) and later, Kagen at al (4) describe the four month old baby's smile of recognition of a face, any face, as evidence of the infant's acquisition of the"facial schema". Here is a second fundamental requirement of the humerous situation: mastery of an intellectual process. Kagen's blank faces, or faces with scrambled features elicited many more fixed stares than smiles. The baby was still working on the presentation, but had not yet fully mastered the variation of the schema.

Later on, at six or eight months, at a more advanced intellectual stage, the baby can distinguish members of his household from strangers. He has gone beyond the any-face schema. Familiar faces have been assimilated and the infant is unwilling to accomodate to the unfamiliar. He finds it frightening and this experience cancels out another requirement of the humerous situation: it must be safe enough to let us laugh.

A first genuine appreciation of humor at about one year old introduces the third and fourth elements of suspense and surprise. The intellectual requirement is that of object permanence. The game of peek-a-boo is a delight to the infant. Mother's face is there, it disappears (Oh, the suspense of it!) and then it reappears. Some weeks before it may have been a case of out-of-sight-out-of-mind, but now the baby knows better. Mother is <u>really</u> there, that is the surprise solution, the aha! phenomenon. (What fun! How funny!) The adult may use words such as, "I see you" "Where's Mommy?" etc. but the essential humor arises, not from the words but from the activity itself.

The use of language in humor does not appear, obviously, until the child has some mastery in speaking words. Zigler et al (5) say it very well, "Children enjoy most that which lies at the growing edge of their capacities." Use of language, plus some understanding of socially appropriate behavior sets the stage in a relaxed nursery school setting for the child to use words in a socially incongruous context. He finds name calling hilarious. "You're a stupid" is in defiance of a socially frowned upon word. "You're a BM" is another socially discouraged, and therefore incongruous word. Toileting and toilet talk in Western culture occurs only in the privacy of the bathroom.

Three to five year old children enjoy having the adult playfully step out of his or her accustomed tole to imitate a monster, make a funny face, or a sound like a frog. The children accomodate to the game, laugh at the monster or croak like a frog.

The film strip, Snowy Day (6) shows a little boy hitting a tree with a stick, the inappropriate use of the stick, and the inappropriate object of the hitting, is very amusing to the children.

Kreitler and Kreitler summarize the incongruities that five year olds find humerous into the following catagories:

1. A combination of parts that don't go together e.g. A car with feet instead of wheels
2. A reversal of roles or functions e.g. A mother in a high chair being fed by a baby.
3. A reversal of sizes, functions, or other dimensions, e.g. A small boy in front of a mountain of ice cream

In the song, "There Was an Old Woman Who Swollowed a Fly"(8), children who are five years and older respond to the rhymes as well as to several incongruities: choice of diet, size of portion, e.g. a cow..."Idon't know how she swollowed a cow ", an inordinate appetite, and finally, the surprise ending, "She died, of course." The surprise is that she didn't die sooner. The tension mounts over wondering what will happen as the old lady eats one unlikely item after another, and finally she dies...of course, we should have known. This is a long song, but time after time I have seen children stay with it to the end. One explanation may be that the song is divided into single episodes, each of which is nonsensical but comprehensible. The ending requires a stretch of the child's intellect (part of the fun); he must recall and summarize the entire song.

Although pre-schoolers like such songs, they are more fully enjoyed by school age schildren who have acquired sufficient language competence and performance to appreciate the form and structure, and at times the ritual joke which includes the cue that this is funny. All of us can remember our own childhood when certain formulas were popular: Knock-knock-who's there?, the moron jokes, the elephant, the grape, etc.

Jokes that involve puns require an understanding and enjoyment of word ambiguity. A favorite, repeatedly told by a seven year old, is about a boy who complains to the shoe salesman that his new shoes are hurting his feet. The salesman tells the boy that the shoes are on the worng feet, and the boy replies that these are the only feet he has. The ambiguity, of course, is on the word "wrong" and the second grader who has thoroughly mastered this ambiguity, thoroughly

PS 004801

enjoys the mistake.

A more complex operation, the ability to reverse and to consider possibilities that are not immediatly apparent is appreciated by an older child, one who is just about to enter the period of formal operations, perhaps at 11 years old. The following riddle is an example (9):

> Sisters and brothers have I none
> But that man's father
> Is my father's son.
> Who is he?
>
> (My son)

Once the human intellect can function with logical formal operations, in adolescence, appreciation of another kind of humor becomes possible, a purely cognitive, aesthetic appreciation of an event that perhaps goes beyond humor. The belly laugh, the whoop and holler don't occur. Instead, there is the quiet admiration of the neat paradox, the truthful man who says, "I'm telling a lie." If he is truthful and says he's telling a lie, he must be lying. But how can a truthful man lie? Another example of a paradox is about the lone barber who lives in a town where he shaves everyone who does not shave himself, but shaves no one who does shave himself. The barber is thus simultaneously under the necessity of shaving and not shaving himself.

In addition to the enjoyment of the logical construction of the puzzle the paradox has another requirement. The participant must also have the ability to withstand the tension of an insoluble puzzle. Like the child who loses the humor of the joke in his attempts to explain it or set it to rights, there are adults who feel

compelled to devise an explanation, such as suggesting that the barber is a Native American (beardless by nature).

Facilitating Factors

At this point, it may useful to summarize the cognitive elements that facilitate children's humor:

1. An ability to grasp one or more incongruities that arise from a disruption of the child's present understanding of environmental ordering, his world.

2. The joke must make cognitive demands. Zigler et al (10) found with seven to ten year olds that jokes that made the most demands upon their comprehension elicited the most laughter. "Getting the joke" appeared to be a major source of satisfaction. Jokes that were too easy were not considered very funny.

3. An element of novelty is essential. The joke is no longer funny after the third telling. Perhaps it is this lack of surprise and challenge that dulls the humor.

4. Timing is important. A period of expectation followed by a sudden, surprising solution brings the crack of laughter, the feeling of mastery, and the sense of wellbeing. By contrast, a labored explanation was found by Kreitler and Kreitler (7) to have a negative effect on facilitating humor.

5. A degree of detachment seems to facilitate the appreciation of humor. Once the participant becomes truly identified with the problem and tries to attack it with vigor, it's no longer funny. Imagine becoming identified with the old woman who swallowed the fly and all the other animals?

Humor as an Instructional Technique

In the course of a discussion of the relationship between cognition and humor, a logical question for an educator to ask is whether humor has a place in the instructional process? If we accept the premise that appreciation of a joke depends upon the intellectual mastery of the content, then the use of humor as a teaching strategy must be directed toward expansion, reenforcement and synthesizing recently learned concepts, rather than brand new consepts.

On television, "Sesame Street" (11) makes excellent use of humor to expand and reenforce new concepts. more than half the material is presented humorously, so that the fun and enjoyment alone holds the audience's attention beyond what might be expected for sessions in number and letter recognition. The pace is fast and the jokes are on a pre-school level. They tend to be easily understood rediculous situations, performed by puppets, cartoon characters or friendly members of the cast. The chaining of one joke to another lures the child into watching one variation after another of a central theme. The symbol for the letter "H" for instance, is followed by a series of nouns, verbs and adjectives in amusing contexts and related to the child's experiences, e.g. height, hot, hat, hiccup. The letter "E" is used in the word egg. Next a picture of an egg. A cow sits on it. Cow gets up and walks away. Egg cracks open and out steps an enormous bird that says, "Moo". The children were delighted.

The problem of identifying attributes, labeling categories and

defining class membership was presented in a skit that showed the puppet Ernie's efforts to convince his puppet friend Bert that a banana was chocolate ice cream. Bert objected that ice cream is soft. Ernie mashed the banana. But ice cream is cold. Ernie added ice cubes. Chocolate ice cream is brown. Ernie poured gravy. For pre-schoolers this is a funny and entertaining medium for learning that attributes are not always generalizable, at least not for bananas and chocolate ice cream.

It must be recognized that concepts in a single T.V. episode, no matter how enjoyable, are not likely to be transferred to other situations in the real world. Watching television is a rather passive activity and young children learn best by direct sensory interaction with materials in their environment. However, the fact remains that children spend many hours in front of the television set. Experienced teachers and parents have been reporting an increased interest and recognition of numbers, letter shapes and sounds. Educational Testing Service (12) administered tests to 900 pre-school Sesame St. viewers, and 900 controls, The controls lived in areas that could not receive T.V. stations. The experimental group demonstrated higher frequencies for understanding number concepts; number, letter, sound recognition; names of geometric shapes, name and function of body parts, sorting and classifying. Except for the last two items it may be argued that these are rather superficial learnings compared to more fundamental operations. But Children's Workshop staff are trying to keep up with learning theory. Recently there was a conservation episode using bubble gum. The storekeeper stacked six pieces of bubble gum into a little tower in front of one child

and placed six pieces in a row in front of another child. The first child complained that his friend had more gum. The storekeeper reversed the arrangement, and the second child complained. It does credit to the writers that no attempt was made to explain concrete operations to a pre-operational audience. The scene just faded out.

Summary

This paper has attempted to show a relationship between intellectual growth and the appreciation of humor. Cognitive strategies related to Piaget concepts included the acquisition of object permanence in the sensory-motor period, ability to categorize and classify in the pre-operational period, reversibility at the very end of concrete operations, and formal operations necessary to solving some riddles and most paradoxes. Appreciation of language ambiguity plays a role in enjoyment of puns.

Cognitive elements essential to humor were listed as understanding the nature of the incongruity, intellectual challenge, novelty, timing and the element of surprise.

Humor has been suggested as a possible strategy for reenforcing and expanding recently learned concepts. Sesame Street has been discussed as an example of using humor to teach academic skills and a few logical operations via television. The motivation may stem from the fact that everyone likes to laugh and is willing to stretch his intellectual capacities for the sake of a good laugh.

REFERENCES:

1. Wolfenstein, Martha, Children's Humor, The Free Press, 1954. Out of print, but available at the San Francisco State College Library

2. Levine, Jacob, Motivation in Humor, N.Y.:Atherton Press, 1969

3. Spitz, Rene, and Wolf, K.M., The smiling response: a contribution to the ontogenesis of social relations, Genetic Psychology Monographs, Vol. 34, 1946, 57-125

4. Kagen, Jerome, Hanker, Barbara, Hen-tov, Amy, Levine, Janet, and Lewis, Michael, Infants' differential reactions to familiar and distorted faces, Child Development, Sept.'66, Vol. 37, No.3 519-532

5. Zigler, Edward, Levine, Jacob, and Gould Laurence, "Cognitive Challenge as a Factor in Children's Humor Appreciation", in Levine, op cit p. 147

6. Keats, Ezra, Jack, The Snowy Day, Viking Press, 1962

7. Kreitler, Hans, and Kreitler, Shulamith, Dependence of laughter on cognitive strategies, Merrill-Palmer Quarterly, April '70 Vol. 16, No,2, 163-177

8. Bonne, Rose, "I Know an Old Lady Who Swallowed a Fly", Winn, Marie, The Fireside Book of Children's Songs, N.Y.:Simon and Schuster, 1966, 116-119

9. Martin, Henry R., The Little Riddle Book, N.Y.:Peter Pauper Press, 1954, p. 43

10. Zigler, Edward, Levine, Jacob, and Gould, Laurence, Cognitive processes in the development of children's appreciation of humor, Child Development, Sept.'66, Vol. 37, No. 3, 507-513

11. "Sesame Street", Children's Television Workshop, San Francisco address: Michael Shapiro, KQED 1011 Bryant Street, San Francisco, Calif. 94103

12. Educational Testing Service, Princeton, New Jersey, 08540